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71034 STERIC  
350635 ORGANIC  
16611 AMPHIPHILIC

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142649 PIGMENT  
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(ORGANIC(W) IONIC)  
16611 AMPHIPHILIC

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L3 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

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TITLE: Modified pigments having **steric** and  
**amphiphilic** groups

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PATENT ASSIGNEE(S): Cabot Corporation, USA

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W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1220879	A1	20020710	EP 2000-967166	20000929
EP 1220879	B1	20030507		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003511513	T2	20030325	JP 2001-528499	20000929
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PRIORITY APPLN. INFO.:			US 1999-157284P	P 19991001
			WO 2000-US26957	W 20000929

AB Various modified **pigment** products are described which are preferably capable of being dispersed in a variety of materials such as

coatings, inks, toners, films, plastics, polymers, elastomers, and the like. The modified pigments are pigments having attached (a) at least one steric group and (b) at least one organic ionic group and at least one amphiphilic counterion, wherein the amphiphilic counterion has a charge opposite to that of the organic ionic group. In addition, inks, coatings, toners, films, plastics, polymers, elastomers, and the like containing the modified pigment products of the present invention are described. Methods of making the modified pigment products are also described. Thus, mixing 600 g carbon black (surface area 200 m<sup>2</sup>/g; DBP absorption 117 mL/100 g) with 31.5 g sulfanilic acid, adding a solution of 6.2 g of NaNO<sub>2</sub> in 600 g of water, mixing for about 10 min, and drying in an oven at 70° gave a carbon black bearing 0.22 mmol C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>Na groups, 20 g of which was combined with 26.9 g H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>(C<sub>3</sub>H<sub>6</sub>O)<sub>n</sub>C<sub>4</sub>H<sub>9</sub> and 2.3 g methanesulfonic acid in a mixture of 50 mL water and 150 mL 2-butanone, stirred at room temperature

for

1 h and at 60° for 1 h, mixed with a mixture of 4-CH<sub>3</sub>CH(NH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>(OC<sub>3</sub>H<sub>6</sub>)<sub>3</sub>OH 7.5, methanesulfonic acid 0.38, water 40 and 2-butanone 40 g, stirred for 1 h and worked up to give a carbon black bearing polymeric group and amphiphilic salt of C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>- group.

REFERENCE COUNT:

9

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